

ABSTRACT OF THE DISCLOSURE

Sub A (A needle cleaning system, for use with a liquid dispensing system that dispenses a quantity of material through a dispensing needle or transfer pin, includes a vacuuming device
5 coupled with a residual material collection device, wherein the collection device includes at least one appropriately shaped orifice for receiving an end of the dispensing needle or pin. The liquid dispensing system further includes control means for periodically positioning the dispensing needle or pin relative the orifice in the collection device. The vacuuming device creates an airflow, which passes around the exterior of the needle or pin and into the collection device,
10 thereby removing residual material from the exterior of the dispensing needle or pin without contact.

TOP SECRET//
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